Appl. No. 10/561,879
Amdt. dated Dec. 8, 2008
Reply to Office action of June 30, 2008

Amendments to the Claims:

This listing of claims will replace all prior versions and listings of claims in the application:

Listing of Claims:

Claims 1-22 (canceled).

- Claim 23 (new): A method for optimising at least one 1 property of a satellite system, the satellite system having 2 a satellite provided with a transmitter for transmitting a 3 satellite signal representing data, and a satellite receiver 4 comprising an antenna array with at least two antenna 5 elements for receiving said satellite signal, wherein the 6 method comprises the steps of: 7 receiving, at said satellite receiver, the satellite 8 signal so as to define a received satellite signal; 9
- determining, from the received satellite signal, received data;
- 12 checking said received data for an amount of data 13 errors; and
- if a result of said checking satisfies a predetermined criterion, changing gain, phase or electrical delay of at least one of said at least two antenna elements.
- 1 Claim 24 (new): The method recited in claim 23 wherein the
- 2 changing step further comprises the step of changing a
- 3 polarisation of the satellite receiver.
- Claim 25 (new): The method recited in claim 24 wherein the
- 2 polarisation is either linear or circular.

- Appl. No. 10/561,879
- Amdt. dated Dec. 8, 2008
- Reply to Office action of June 30, 2008
- Claim 26 (new): The method recited in claim 23 wherein the
- 2 antenna array comprises an electrically tunable antenna
- 3 array.
- 1 Claim 27 (new): The method recited in claim 23 wherein the
- antenna array comprises a phased array antenna.
- Claim 28 (new): The method recited in claim 23 further
- 2 comprising the step of calibrating at least one of the
- 3 antenna elements.
- 1 Claim 29 (new): The method recited in claim 23 further
- comprising the step of optimising at least one property of
- an antenna beam of the satellite receiver.
- 1 Claim 30 (new): The method recited in claim 29 further
- comprising the step of changing amplitude of the satellite
- 3 signal before determining the data from the satellite
- 4 signal.
- Claim 31 (new): The method recited in claim 23 wherein the
- data represented by the satellite signal is encoded data,
- said encoded data having been encoded by means of a coding
- algorithm, and wherein said determining step comprises the
- 5 step of decoding the data with a suitable decoding
- algorithm; and the received data checking step comprises the
- 7 step of determining the data errors from the decoded data.
- Claim 32 (new): The method recited in claim 31 wherein the
- 2 data represented by the satellite signal is encoded with an
- 3 MPEG-2 compliant coding algorithm.

- Appl. No. 10/561,879
 Amdt. dated Dec. 8, 2008
 Reply to Office action of June 30, 2008
- Claim 33 (new): The method recited in claim 31 wherein the
- data represented by the satellite signal is encoded with a
- forward error correction coding algorithm.
- Claim 34 (new): The method recited in claim 31 wherein the
- data represented by the satellite signal is encoded with a
- 3 Viterbi coding algorithm.
- Claim 35 (new): The method recited in claim 31 wherein the
- data represented by the satellite signal is encoded with a
- 3 Reed-Solomon coding algorithm.
- Claim 36 (new): The method recited in claim 23 wherein the
- 2 result satisfies the predetermined criterion if a ratio of
- an amount of the data errors relative to an amount of data
- 4 exceeds a predetermined threshold value.
- Claim 37 (new): The method recited in claim 36 wherein the
- 2 ratio is a bit error ratio.
- 1 Claim 38 (new): An optimisation device for a satellite
- receiver, the optimisation device comprising:
- an optimisation input connectable to at least one
- 4 signal output of the satellite receiver for receiving at
- 5 least one received satellite signal representing received
- 6 data;
- a data error determining section communicatively
- 8 connected to the optimisation input, for determining an
- 9 amount of data errors in said received data;
- a comparator for comparing the amount of data errors
- With a predetermined criterion, said comparator having a
- 12 comparator output for providing an adjust signal if the

Appl. No. 10/561,879
Amdt. dated Dec. 8, 2008
Reply to Office action of June 30, 2008

amount of data errors satisfies said predetermined criterion;

wherein the receiver comprises an antenna array with at least two antenna elements;

the optimisation device further comprises an adjuster device for adjusting gain, phase or electrical delay of at least one of the antenna elements in response to the adjust signal from the comparator output.

Claim 39 (new): A satellite receiver, comprising at least two antenna elements;

a control device arranged for controlling gain, phase or electrical delay of at least one of the antenna elements; said control device having an input for receiving a control signal and an output connected to a control input of the antenna elements; and

at least one optimisation device as recited in claim 38 communicatively connected with its optimisation input to a signal output of said at least one antenna element and connected with an optimisation output to the input of the control device for adjusting gain, phase or electrical delay of said at least one of the antenna elements.

Claim 40 (new): A satellite system comprising a satellite with a signal source arranged for transmitting a satellite signal representing binary data and at least one satellite receiver as recited in claim 39 for receiving the satellite signal.

Claim 41 (new): A computer readable media having machine executable instructions stored thereon for enabling a

Appl. No. 10/561,879
Amdt. dated Dec. 8, 2008
Reply to Office action of June 30, 2008

- programmable device to perform steps of the method as
- 4 recited in claim 23 when the instructions are executed on
- said programmable device.